# CITY OF TORRANCE, CA – PUBLIC WORKS DEPARTMENT REQUEST FOR PROPOSALS

PALOS VERDES BOULEVARD REHABILITATION- DESIGN, I-121 (Pacific Coast Highway to South City Limits)

RFP2012-05

#### **Project Description**

The City of Torrance is requesting Proposals for the *design* of the Palos Verdes Boulevard Rehabilitation (Pacific Coast Highway to South City Limits). Palos Verdes Boulevard is an arterial street carrying approximately 25,000 vehicles per day. It contains two travel lanes in each direction throughout the project limits which measures approximately 5,780 feet long. The condition of the street is deteriorated and has become a significant maintenance problem. Improvements will consist of pavement rehabilitation as recommended by a pavement analysis, and observation as part of this contract. It will also include construction of missing and/or damaged concrete curb, gutter, sidewalks, and cross-gutters. Asphalt rubber hot mix (ARHM) pavement overlay will be considered as an option.

Project Schedule: Design: June 2012 – March 2013; Construction: June 2013– February 2014

Total Project Budget for design, construction and inspection: Not to exceed \$2.09 million

#### SUBMITTAL REQUIREMENTS

**PART 1 - PUBLIC OPENING OF PROPOSALS:** The City has prepared a scope of work (included herein) and is requesting from your firm a proposal and summary of qualifications for the subject work. The following are required items to be included in the initial proposal:

- 1. A summary of the understanding of the project and scope of work
- Qualifications of qualified Civil Engineer. Persons considered qualified would be CA registered Professional Engineer (Civil) with a minimum of 7 years previous experience designing and managing public works projects. Desired qualifications are experience with design of projects that involved: street reconstruction and drainage. A desired "Project Scope" is included with this RFP.
- 3. A list of the relevant projects that proposed Civil Engineer has worked on. Do not list projects that proposed staff was not involved, even if your firm was.
- 4. Qualifications/Experience and financial responsibility of your firm
- 5. Time Schedule
- 6. Organization Chart
- 7. References

If interested, please submit three (3) copies of your proposal in a three ring binder to:

City of Torrance Office of City Clerk 3031 Torrance Blvd, Torrance, CA 90503; ATTN: RFP2012- 05

#### **Method and Criteria for Selection**

The City will select a consultant in accordance with criteria listed below.

Criteria	Maximum Points	Rating
Understanding of the project, scope of work and completeness of RFP	20	Rumg
Qualifications of proposed staff (meets minimum requirements and amount of desired qualifications)	25	
Relevant projects of proposed staff	15	
References	15	
Time Schedule (will provide final plans and specifications within the scheduled time frame)	15	
Firms Qualifications/Experience with similar work and Financial responsibility	10	
Maximum Total Score	100	

Submittals must be received by <u>2:00 p.m. on Thursday March 15th, 2012</u>. <u>RFPs received after the deadline or deemed incomplete will be considered non-responsive.</u>

For questions or further information, please contact Lea Reis, Associate Engineer at (310) 618-3055 or Beth Overstreet, Engineering Manager at (310) 618-3074.

**PART 2 SHORT LIST OF FIRMS:** After the public opening of the request for proposals, a committee will be formed to develop a short list of firms. The firms on this short list will then be interviewed, at which time a detailed fee estimate will be requested. The fee estimate, *submitted in a sealed envelope at the time of the interview*, should provide a schedule of the firm's fees and a cost for each element of the project using the format below. Firms are invited to list any additional services and associated costs that are not covered in the city's scope of work. These items should be listed separately from those specifically requested so they may be considered. Only once the selection has been made will the fee proposal from the selected company be opened.

## Sample Fee Estimate (Part 2 only)

	Project Manager	Engineer	Admin	Consultant	Total
TASK					
PRELIMINARY DESIGN					
Project Kick Off Meeting					
Research and Review Data					
Site Evaluation					
Subtotal - Preliminary Design					
PRELIMINARY SURVEY, STUDIES AND COORDINATION					
Design topographic survey					
Utility research and notification					
Utility Potholing					\$15,000
Utility Coordination					

Base Sheets			
Pavement Evaluation/Analysis			
Review/Design			
Traffic Index Calculations			
Subtotal - Preliminary Survey			
Studies and Coordination			
PLANS AND PROFILE			
30%, 60% and 90% plan			
submittal (Construction and			
Traffic Control Plans)			
Quantity calculation and cost			
estimate			
Project Specifications			
100% submittal of PS&E			
Final Submittal			
Project Management and			
meetings			
Bid and Construction Support			
Survey monuments			
preservation			
Reimbursable expenses	 		
Permits (Cal Trans, City of	 		
Redondo Beach and City of			
Rancho Palos Verdes)			
Subtotal - Plans and Profile			

#### **Project Scope**

## I. Preliminary Design

### A. Project Kick-Off Meeting

Consultant will attend a kick-off meeting at the City and prepare a meeting agenda. The agenda should include:

- Lines of communication between the City, consultant, utility agencies and other agencies involved in the project.
- Discuss the project requirements, scope of work and schedule.

Consultant should prepare and distribute meeting minutes with any action items.

#### B. Research/Review of Available Data

Consultant will research and obtain all available data as a reference to prepare the preliminary and final PS&E. Data includes, but is not limited to, State, County, City, utility and other records/documents, existing street, storm drain, gas, sewer and water main improvement plans, topographic data maps, record drawings, wet and dry utility plans (to determine size and location), geotechnical reports, survey centerline and private property monument data and other pertinent information. Consultant will prepare a table summarizing the obtained data and submit a copy to the City and utility agencies. The Project Team will review this information prior to beginning surveys and preliminary design.

#### C. Site Evaluation

Perform a field inspection of Palos Verdes Boulevard to:

- Verify record drawings and other data
- Identify areas of structural damage to existing AC pavement needing either localized repair/reconstruction or overlay.
- Identify damaged curb and gutter, cross-gutters, sidewalk/curb ramps and driveways to be replaced or constructed.
- Identify existing asphalt sidewalks and curbs to be replaced with standard concrete sidewalks and curb & gutter.
- Create a photo log of key project areas.

Consultant will schedule a City representative to be present during the inspection(s) of the existing pavement and damaged curb and gutter, cross-gutters, sidewalk/curb ramps and driveways.

#### II. Preliminary Surveys, Studies & Coordination

#### A. Design Topographic Survey

Consultant or its subcontractor will perform the Design Topographic survey. The survey shall be in conformance with the State Land Surveyors Act and be performed under the direct supervision of a CA Registered Land Surveyor. Consultant shall use California State Plane Coordinate System, NAD83, Zone V, US Survey Feet. Tasks include:

- **1** Establish horizontal and vertical survey and construction control for the complete length of the project.
- **2** Perform topographic survey, as required, and may include, but not be limited to:
  - **2.1** Cross section elevations taken at 25ft. intervals. The sections will follow this format: property line/right-of-way, back of walk, top of curb, flow line, edge of gutter/pavement, grade breaks and/or quarter points, pavement delineation and legends (striping, STOP bars, etc.), finish surface at the centerline.
  - 2.2 Locate all existing improvements within the street right-of-way (i.e. above ground utilities, manholes, valve covers, utility vaults and covers, signs, trees, utility poles, traffic signal poles, cross gutters, local depressions, bus pads, catch basins, driveway openings, sidewalks, corner access ramps, parkway drains, etc).
  - **2.3** Reduce data to a form showing centerline stationing, offset from centerline, and elevation.
  - **2.4** Provide 0.5 ft contours.
  - **2.5** Approximately 14 centerline monuments are within the construction area. Consultant shall tie out all centerline monuments prior to construction and identify them in the design survey.
  - **2.6** Identify in the survey any other monuments, including those on tops of curbs, sidewalk or in the parkway.
- **3** Consultant will sign, date and submit all original survey notes to the City within 15 working days after the completion of the survey.

Consultant shall provide traffic control as required during survey operations. Lane closures shall be in accordance with City of Torrance Standards located at the following website: http://www.torranceca.gov/13023.htm and the MUTCD 2012 California Supplement.

#### B. Utility Research and Notification

Research and obtain available existing utility records within the project limits. Compile a Utility Notification and Response Log in a table format and include dates of notification, persons/utility notified and responses from utility. Copies of this information will be provided to the City. Notifications will include:

- Initial Utility Information Request
- Prepare to Relocate Notice (if applicable)
- Notice to Relocate (if applicable)

Utilities to be notified will include: Southern California Edison, AT&T, Verizon, GTE, Southern California Gas, Time Warner Cable, petroleum Companies, Water, Sewer and Storm Drain agencies.

#### C. Utility Potholing

Consultant will provide a fixed \$15,000 allowance for utility potholing. Locations will be based on information received from utility investigations. Consultant will arrange for utilities to be marked prior to the design topographical survey. Pothole locations and depths will be marked on the pavement surface and will show both horizontal location and depth from surface to the utility. Compensation will be based on actual cost plus 7% markup, but may not exceed \$15,000. From the utility research and utility potholing, Consultant will compile and incorporate utility information on the roadway Base Sheets. Conflicts with existing utilities will be identified for resolution with the conflicting utility. (Note: This item may be deleted by the City if determined not needed for construction)

#### **D.** Utility Coordination

Consultant will coordinate with the utility agencies throughout the design phase. If the proposed improvements interfere with existing utilities, consultant will arrange for potholing by the utility. Otherwise, any needed potholing will be performed under the potholing allowance provided in this scope. If required, Consultant will obtain any permit that is required for construction of the project, from any agency or utility company.

#### E. Base Sheets

Consultant will prepare Base Sheets utilizing the design topographic survey, utility research data and existing street, storm drain, sewer and water main improvement plans. The Base Sheets will be utilized for the design of the street rehabilitation/overlay, signing and striping plans. The base plans will be prepared at a 1"=40' scale.

Consultant shall data process all topography in AutoCAD Version 2011 or latest edition. Linestyles will be conventional. Text annotation will be stored in layers separate from the graphic elements. An AutoCAD file, layering, linestyle and color specification will be provided by the Consultant to the Client, if requested. Locations of any property lines, centerlines or rights of ways shown on the topography shall be shown graphically from specified Datum.

The topographic file shall include the basis of horizontal and vertical control, North arrow, date of survey, Survey Crew Chief and supervising Licensed Land Surveyor review and sign off, notes and details.

#### F. Pavement Evaluation Review/Design

Consultant shall provide a pavement evaluation/analysis report. Consultant will review the report and discuss the recommended pavement rehabilitation alternatives with the City. This will include the following:

- Obtain pavement analysis through geotechnical boring and testing.
- Assess data and evaluate methods for rehabilitation.
- Prepare value engineering spreadsheets with cost breakdowns for 3 alternatives, including comparisons based on projected life.
- Present and discuss recommendations with City.
- After concurrence by the City, the final limits of removal will be shown on the plans.

## **G.** Traffic Index Calculation

Consultant will calculate an individual traffic index (TI) within the project limits, each based on a 20-year growth. Consultant shall use both the LA County and State of California methods to calculate a TI.

#### **III Plans & Profiles**

#### A. 30%, 60% & 90% Plan Submittal

All plan types will be in conformance with City of Torrance format, the latest applicable design/drafting standards and shall incorporate the City of Torrance Title block. The Public Works Department Title Block shall be used on all plan sheets.

Consultant will prepare and submit plans to the City and utility agencies at 30%, 60% and 90% completion. Plans shall be on 24" x 36" sheets, unless otherwise required for utility agencies. Type shall be blacklined bond paper. Consultant shall submit two (2) sets of plans to the City for each submittal.

The following is a listing of plan sheets with corresponding scale to be used as determined by the City.

PLAN	SCALE
Title Sheet	Varies
Construction Notes and Details	1" = 10', Varies
Typical Cross Sections	Varies
Roadway Rehabilitation Plan and Profile	1" = 40' H 1" = 4' V
Intersection Grid Details	1" = 10' H Grids at Lane Lines
Traffic Control & Staging Plans	1" = 40' H
Sign and Pavement Delineation Plans	1" = 40' H

**Title Sheet** will include project title, vicinity map, general notes, benchmark with basis of coordinates, dig alert information and legend of symbols.

**Construction Notes and Details** will include a construction note index, list of utility companies with contact name and telephone number, list of standard plans grouped by agency (i.e. SPPWC, City of Torrance, Caltrans, etc) and construction details. Multiple sheets may be required.

**Typical Cross Sections** will show right-of-way lines, dimensions between curbs, existing pavement surface and curb/gutter, existing roadbed, proposed improvements and grading/crossfall slope. Pavement cross falls should be kept at 2% optimal; however, cross falls may vary from 1% to 5% as needed for grade and to minimize reconstruction. Construction notes related to proposed improvements shall be included on this sheet. Cross sections will be discussed with the City at the 30% and 60% submittal to identify potential problems.

Roadway Rehabilitation Plan and Profile will show all existing improvements, as shown on the Base sheets and all existing underground utilities (sewer, water, gas mains and associated laterals, storm drains, catch basins and laterals, manhole and valve covers, meter boxes etc). Proposed work will indicate limits of removals and replacements and cold planing limits, street overlay and rehabilitation areas, adjustment of manholes, vaults and valves to grade. Plans also shall indicate removal/replacement of curbs, gutters, sidewalks, access ramps, driveways, bus pads, cross gutters, parkway/curb drains and protection of existing facilities. Consultant shall consider and determine the need and location for the preservation of existing control monumentation and the placement of new control monumentation. At a minimum, each sheet shall contain a north arrow, scale, match lines with station and sheet reference, plan and profile construction notes for all improvements on the sheet. Profile shall show existing tops of curb elevations with corresponding station and slope of curb between each grade break. For corner access ramps, provide station and elevation at BCR and ECR and label as "join existing." Elevations also should be provided at quarter points. Dimension the distance between each quarter point and the length of the curve.

**Intersection Grid Details** will be prepared at the following signalized intersections:

Palos Verdes Blvd and Calle Mayor
Palos Verdes Blvd and Calle Miramar
Palos Verdes Blvd and Catalina Ave/Via Monte D'oro

Grids will be shown at 10-foot spacing and show existing and proposed elevations. These plans are primarily for control during paving operations and should show all existing improvements, underground utilities and surface culture on a larger scale. In order to avoid erroneous data, curb/gutter, sidewalk and improvements from other plan sheets should not be duplicated on these sheets.

**Traffic Control & Staging Plans** for Palos Verdes Blvd and intersecting side streets should be designed in accordance with MUTCD 2012 California Supplement. Traffic control on streets within the City of Redondo Beach and Rancho Palos Verdes shall be reviewed and approved by those cities. Permits shall be obtained as required.

Construction will require traffic control on Pacific Coast Highway, an east-west state highway. A separate sheet(s) will be required to show the closure of each westbound left-turn lane and east bound right turn lane, and any traffic control to safely delineate eastbound and westbound traffic through the turn lanes into the construction zone. This sheet(s) shall include a signature line for Caltrans District 7, its permit number and include both standard and metric units for dimensions.

Note: Prior to beginning work on these plans, consultant shall meet with the City to discuss and determine construction staging, minimum lane requirements, side-street and driveway access and plan notes and legend. It is anticipated that the project will be constructed in stages and each stage will require traffic control plans.

**Sign and Pavement Delineation Plans** will be prepared for Palos Verdes Boulevard and intersecting streets within the proposed street improvement limits. The plans shall be segmented to minimize the number of plan sheets.

The plans will be prepared in accordance to City standards and design criteria and Caltrans "Traffic Manual" and Standard Plans and Specifications (latest edition). Plans will provide for at least 200 feet of transition for each leg of the intersecting streets.

Plans will show: all existing signs within the project limits, including those mounted on traffic signals, street light and utility poles; proposed signs; and proposed pavement delineation and pavement legends/arrows within the project limits. Consultant shall include those areas on intersecting side streets that are within the project limits. Centerline stationing shall be shown on the plans.

## **B.** Quantity Calculations and Cost Estimate

Consultant shall submit preliminary quantities and construction cost estimate at the 60% and 90% submittals. Unit prices will be based upon the most current cost information for a recent, similar project. The final quantity/cost estimate will be based on the final construction plans and submitted with the 100% submittal. Cost estimates shall include a 5% contingency.

Note: The budget (design and construction) for this project is \$2.09 million. The consultant shall compare its estimated construction costs for the 60% and 90% submittal to the available budget. If the consultant's estimated costs exceed the available budget, the consultant shall inform the City and provide recommendations for costs reduction.

#### C. Project Specifications

Consultant will use the city's standard "boiler plate" specifications (Word 2007) and prepare the Special Provisions portion of the Construction Specifications and Contract Documents suitable for bidding and awarding of the Contract. These special provisions will be incorporated into the City's standard construction document package. Consultant will prepare the Bid schedule.

## D. 100% Submittal of Plans & Profiles, Specifications/Special Provisions, Quantities and Cost Estimate

The 100% submittal will include two (2) complete sets of: all plans, specifications/special provisions and quantities/cost estimate for final review. Minimal corrections may not be needed, but should be expected. Plans shall be on 24" x 36" sheets. Type may either be blueline ammonia or blacklined bond paper.

#### E. Final Submittal

Upon City approval of the 100% plans/profile submittal, consultant will submit a complete set of stamped/signed (CA Registered Civil Engineer) original plans on mylar, an unbound set of stamped/signed specifications/special provisions and a quantities/cost estimate. The consultant will also submit an electronic copy of all final AutoCAD drawings (with x-refs and plot configuration files), specifications/special provisions and quantities/cost estimate on a CD-ROM.

Caltrans Encroachment Permit Application for Pacific Coast Highway Following the meeting on Traffic Control & Staging Plans, Consultant will prepare and submit, on behalf of the City, a Standard Encroachment permit application with applicable plans to Caltrans District 7, 100 South Main St., Suite 100, Los Angeles, CA for review and approval. The City should be exempt from a permit application fee. Caltrans processing of City permits is assigned to Mr. Patrick Truong (213) 897-3631. The Consultant should include an optional task and fee to prepare a PEER report for work in the vicinity of Pacific Coast Highway.

F. Permit application for traffic control within Redondo Beach and Rancho Palos Verdes Following the meeting on Traffic Control & Staging Plans, Consultant will prepare and submit, on behalf of the City, a Standard Encroachment permit application with

applicable plans to the cities of Redondo Beach and Rancho Palos Verdes for review and approval.

## G. Project Management & Meetings

Consultant will perform all project management services during the course of the project as required to complete its contract work (i.e. General Project Coordination, Preparation of Schedule, Quality Control, Progress Reporting, Subconsultant Management).

To ensure understanding of the contract objectives and coordination between the team, meetings between the City and Consultant will be held as follows: for each of the submittals (30%, 60% and 90%), traffic control and staging, and two additional meetings, as requested for a total of six meetings. Consultant shall have no more than 2 attendees per meeting. Project objectives, schedule and any other issues will be discussed and resolved or assigned for follow-up.

At the 30%, 60% and 90% meetings, consultant will bring copies of any completed plans, specifications, estimate and an updated project schedule for submittal.

#### H. Bid and Construction Support

Consultant will provide an estimate for allowance for bid and construction support. Compensation will be based only on actual effort and cost..

## I. Survey Monument Preservation

Approximately 9 centerline monuments are within the construction area. Consultant shall tie out prior to construction and prepare and file Corner Records with the County of Los Angeles and City of Torrance.

#### J. Reimbursable Expenses

This task is intended to budget for reimbursable expenses that are associated only with reprographics of plans and paper documents, postage and mileage when making submittals to the City and other agencies or utility companies. Costs to print documents, produce reprographics, postage, telephone, faxes and mileage for consultant's internal review and/or coordination with satellite offices or sub-consultants should be included in the fees for the various tasks.

#### K. City Responsibilities

- 1. City will provide access to the site.
- 2. City will provide an electronic copy of its "boiler plate" specifications.
- 3. City will provide a copy of its records of centerline monuments/ties.
- 4. City will provide an electronic copy of the Public Works Department title block.
- 5. City will provide samples of various sheets from a recent street improvement project.

#### City's Pro Forma Consulting Services Agreement

A sample of the City's Consulting Services Agreement is included in Appendix I. The initial contract will be for a period of 2 years. Although the City's Consulting Services Agreement complies with CA law for contracting with Architectural and Engineering firms and modifications are not encouraged, we request that your RFP identify any language, if at all, you may object to. Should an objection be identified, we request that you propose alternate language in the RFP. Any objection(s) will not affect your rating. It will, however, provide the City with information to assist with quickly completing any negotiations subsequent to rating all consultants.